REMARKS

Status of the Claims

Claims 1-18 are pending; claim 1 is amended; claims 12-13 and 15-16 are withdrawn; claims 10, 11 and 14 are canceled; and claims 19, 17 and 18 are amended.

Claim 1 has been amended for punctuation.

Support for new claims 19-21 is found, for instance, in the original claims, Figures 1-6 and on page 6 of the specification, describing those figures.

No new matter has been added.

1. Claim Rejections under 35 USC Section 102(b)

The Examiner has rejected claims 1, 3-5, 9 and 17-18 as allegedly anticipated by Felzmann et al. (2001) for the reasons set forth in the Office Action dated November 12, 2007. (Office Action, page 2). Applicant respectfully traverses.

First of all, Applicant maintains that Felzmann et al. (2001) does not anticipate the presently claimed tumor treatment methods for the reasons presented in the May 25, 2007 Amendment.

Next, Applicant points out that the LPS and IFN-gamma mediated maturation of tumor-antigen-loaded DCs is an important novel and non-obvious aspect of the presently claimed tumor treatment methods and that this maturation step is clearly recited in the claims. A clear difference therefore exists between the step of maturing DCs through LPS and IFN-gamma treatment according to the present invention and the step of maturing DCs by co-culturing them with accessory CD40L expressing cells as taught by Felzmann et al. (2001).

Applicants reiterate that the presently claimed tumor treatment methods do not involve the co-cultivation of DCs with accessory CD40L expressing cells that stimulate the administered DCs to secrete IL12. It was well known in the DC/tumor immunology art at the time of the invention

that maturation with CD40L enabled the maturation/release of DCs for direct activation of cytotoxic T cells. (See Lanzavecchia (1998), enclosed with this paper). Similarly, Felzmann et al. teach maturation of DCs by co-cultivation with accessory CD40L expressing cells as a required step for inducing DCs to secrete IL-12 (for direct activation of cytotoxic T cells that destroy target cells, such as tumor cells). Applicants describe a method that avoids co-cultivation.

In support of the fact that the DC maturation methods taught by Felzmann et al. require accessory CD40L cells, Applicant directs the Examiner's attention to the following disclosure in Felzmann et al. (2001):

> "*2.3 DC isolation, cultivation, and maturation*
>
> ...These **immature DCs were exposed to CD40L or control transfected irradiated (6000 rad) cells (ratio DC/CD40L cells = 2:1)**, 100 ng/ml LPS (Sigma, St. Louis, MO), or 1 µg/ml trimeric soluble rhCD40L (Alexis, San Diego, CA) with or without cross-linking second step reagent or left untreated." (Page 147, right column, lines 32-36). (Emphasis added).

Consequently, the statement by Felzmann et al. (2001) regarding direct injection of DCs as tumor vaccines (page 153, left column) has a completely different character than the present invention when one considers that - before the present invention – accessory CD40L expressing cells were used to mature DCs and were administered to the patients together with the DCs (because, as discussed above, accessory CD40L expressing cells were used to mature DCs prior to the present application). Again, this disclosure is outside the scope of the presently claimed methods for treating tumors.

For at least the foregoing reasons, Applicant submits that Felzmann et al. (2001) does not anticipate the presently claimed tumor treatment methods, and respectfully requests reconsideration and withdrawal of the anticipation rejection.

2. Claim rejections under 35 USC Section 103

The Examiner has rejected claim 2 as allegedly obvious over Felzmann et al. (2001) in view of Asavaroengchai et al. (2002). The Examiner has also rejected claims 6-8 as allegedly obvious over Felzmann et al. (2001) in view of Reiser (1999) and in further view of Felzmann et al. (2000). The Examiner's detailed reasoning for imposing the obviousness rejections appears on pages 6-7 of the Office Action, and is not reproduced here. Applicant respectfully traverses.

Applicant submits that Felzmann et al. (2001) does not teach the presently claimed tumor treatment methods for the reasons presented in the anticipation section. Applicant further submits that neither Asavaroengchai et al. (2002), Reiser (1999) nor Felzmann et al. (2000) rescue the Felzmann et al. (2001) deficiencies. It follows that even the combination of the cited references fails to teach the presently claimed tumor treatment methods, and the Examiner has failed to establish *prima facie* obviousness. Applicant therefore respectfully requests reconsideration and withdrawal of the obviousness rejections.

3. Conclusion

In view of the foregoing amendments and remarks, Applicant request immediate allowance of the claims, which define subject matter that meets all statutory patentability requirements.

Pursuant to 37 C.F.R. §§ 1.17 and 1.136(a), Applicant respectfully petitions for a two (2) month extension of time for filing a reply in connection with the present application, and the required fee is attached hereto.

Should there be any outstanding matters that need to be resolved in the present application; the Examiner is respectfully requested to contact Len Svensson, Registration No. 33,330, at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution of the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional

fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

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Respectfully submitted,

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Enclsoure: A. Lanzavecchia, License to Kill. *Nature*, VOL 393, 413-414 (1998)